

What is claimed is:

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1. A method comprising:
- determining whether information scheduled to be broadcast digitally is utilizing all bandwidth previously allocated to broadcasting the information; and
- if not, broadcasting additional information using an unused portion of the previously allocated bandwidth.
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2. The method of claim 1 further comprising limiting the amount of additional information to a preset percentage of the total available bandwidth.
3. The method of claim 1 including determining in real-time whether additional information can be broadcast over a portion of the previously allocated bandwidth that is actually unused.
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4. The method of claim 2 wherein said broadcasting of a portion of the additional information is stopped when the preset percentage is reached.
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5. The method of claim 4 wherein said broadcasting the portion of the additional information to be stopped is selected based upon at least one of content provider, bandwidth range and sequence of content provision.

6. The method of claim 1 including determining in real-time whether there is any unallocated bandwidth; and, if there is unallocated bandwidth with respect to a particular timeframe, broadcasting supplementary information to occupy a least a portion of the unallocated bandwidth during the particular timeframe.

7. The method of claim 6 including determining in advance of the particular timeframe whether the supplementary information can be broadcast over the unallocated bandwidth.

8. A digital communication system comprising:
an automated management system that controls scheduling of digital broadcasts, and is configured to determine whether information scheduled to be broadcast utilizes all bandwidth previously allocated to broadcasting the information, and if not, to broadcast additional information using an unused portion of the previously allocated bandwidth.

9. The digital communication system of claim 8 wherein the automated management system is configured to limit the amount of additional information to a preset percentage of the total available bandwidth.

10. The digital communication system of claim 8 wherein the automated management system is configured to determine

whether additional information can be broadcast over a portion of the previously allocated bandwidth that is actually unused.

5 11. The digital communication system of claim 9 wherein the system is configured to stop the broadcast of a portion of the additional information when the preset percentage is reached.

10 12. The digital communication system of claim 11 wherein the system is configured to select the portion of the additional information to be stopped based on at least one of content provider, bandwidth range, and sequence of content provision.

13. The digital communication system of claim 8 wherein the automated management system is configured to determine whether there is any unallocated bandwidth; and, if there is unallocated bandwidth with respect to a particular timeframe, the system is configured to broadcast supplementary information to occupy at least a portion of the unallocated bandwidth during the particular timeframe.

20 14. The digital communication system of claim 13 wherein the automated management system is configured to determine in advance of the particular timeframe

B1 whether the supplementary information can be broadcast over the unallocated bandwidth.

5 15. An article comprising a computer-readable medium which stores computer-executable instructions for causing a computer system to:

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A1
B1 determine whether information scheduled to be broadcast over a digital network is utilizing all bandwidth previously allocated to broadcasting the information; and

10 if not, broadcast additional information using an unused portion of the previously allocated bandwidth.

16. The article of claim 15 which further stores instructions that cause the computer system to limit the amount of additional information to a preset percentage of the available bandwidth.

20 B1 17. The article of claim 15 which further stores instructions that cause the computer system to determine whether additional information can be broadcast over a portion of the previously allocated bandwidth that is actually unused.

25 18. The article of claim 16 which further stores instructions that cause the computer system to stop broadcasting a portion of additional information when the preset percentage is reached.

5 19. The article of claim 18 which further stores instructions that cause a computer to stop broadcasting a portion of the additional information and wherein the portion of the additional information is selected based on at least one of content provider, bandwidth range and sequence of content provision.

10 20. The article of claim 15 which further stores instructions that cause a computer to determine in real-time whether there is any unallocated bandwidth; and, if there is unallocated bandwidth with respect to a particular timeframe, broadcasting supplementary information to occupy at least a portion of the unallocated bandwidth during the particular timeframe..

15 21. A digital communication system comprising:
a bandwidth pipe operable to transport digital information;
20 a monitor to determine bandwidth usage in the bandwidth pipe;
a system manager to broadcast additional information if there is available bandwidth in the bandwidth pipe, using an unused portion of the previously allocated
25 bandwidth;

22. The digital communication system of claim 21 wherein the system manager limits the amount of additional

information to a preset percentage of the total available bandwidth.

23. A method comprising:

5 broadcasting a program that occupies an amount of bandwidth over a cable;

monitoring the amount of bandwidth the program uses;

B1 and if bandwidth is available, broadcasting additional information over the cable.

10 24. The method of claim 23 including limiting the amount of additional information to a preset percentage of the total available bandwidth.